

**I claim:**

1. An apparatus for locating a receiver of radio communication, comprising:  
a system control unit for controlling the apparatus;  
5 a direction detection unit, using a heading direction of a vehicle or the apparatus as a standard direction for judging a direction of the receiver;  
a longitude-and-latitude detection unit, receiving a satellite's signals by applying a GPS to obtain longitude and latitude data of a user;  
10 an operation unit, controlled by the system control unit for receiving signals from the direction detection unit, the longitude-and-latitude detection unit and a following data transmission unit;  
a display unit for displaying display data from the operation unit;  
the data transmission unit for enabling the operation unit to transform the longitude and latitude data of the user and communication data of an opposite user and for forwarding data to a radio communication interface unit of the opposite user through a radio communication interface unit of the user;  
15 the radio communication interface unit for establishing radio connection with a radio communication device;  
20 a voice transmission unit for transforming voice signals of a voice procession unit and forwarding the transformed voice signals to the opposite user through the radio communication interface unit and for transforming incoming voice signals provided by the radio communication interface unit into signals acceptable to the voice procession unit;  
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- the voice procession unit for processing the voice signals from a microphone or the voice transmission unit;
- a human-machine interface for the user to input settings of the apparatus;
- the microphone for the user to input voice; and
- 5 a speaker for outputting the voice signals of the voice procession unit;
- wherein, by providing all the units above, the user is able to locate quickly and easily a position of the opposite user.
2. The apparatus for locating a receiver of radio communication according to claim 1, wherein said data transmission unit includes an FSK modulation unit and a mix unit for transforming digital data into voice-frequency signals to facilitate transmission of said radio transmission interface unit.
- 10 3. The apparatus for locating a receiver of radio communication according to claim 1, wherein said direction detection unit is selected from a gyroscope, an electronic compass, and a direction detection element that utilizes GPS Doppler effect.
- 15 4. The apparatus for locating a receiver of radio communication according to claim 1, wherein said radio communication device is selected from a GSM system, a DCS system, a radio intercom and a device for radio communication.
- 20 5. The apparatus for locating a receiver of radio communication according to claim 1, wherein said voice procession unit is able to eliminate noises, echoes and unexpected voices.
6. The apparatus for locating a receiver of radio communication according to claim 1, wherein said human-machine interface is a key-type or touch screen-type input device.
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